

RULE 43: Benghal Dayflower (*Commelina benghalensis*) Quarantine .

Under the authority of the Mississippi Plant Act, Sections 69-25-1 through 69-25-49 and Rule 41 adopted there under, this rule serves to prevent new introductions into Mississippi and spread of benghal dayflower/tropical spiderwort (*Commelina benghalensis*) within Mississippi to major agricultural lands. The Mississippi Department of Agriculture and Commerce, Bureau of Plant Industry hereby declares *Commelina benghalensis* to be a noxious weed. This rule also establishes procedures to prevent further introduction and spread of benghal dayflower from infested counties.

I. Notice is hereby given that the movement of regulated articles listed below into or within the state of Mississippi in any stage is hereby prohibited:

- A. All live stages of *Commelina benghalensis*, including seeds, vegetative growth, roots and stolons.
- B. Soil from known infested fields, whether on commodities, seed or equipment.
- C. Farming equipment, excavation equipment and vehicles containing or holding soil or vegetative plant material coming from a known infested field, including but not limited to peanut harvesters, combines, tillage equipment, cotton pickers, bulldozers, backhoes, excavators, dump trucks, etc.
- D. Hay harvested from infested fields, including peanut hay.

II. Quarantined Area

- A. Fields or premises located in George, Jackson or other Mississippi counties wherein detections of *Commelina benghalensis* have been detected and/or declared infested by the State Entomologist.
- B. The entire state of Georgia, known infested counties in Alabama, North Carolina and Florida and counties known to be infested in other states as determined by the State Entomologist.

III. Conditions governing transport or shipment of regulated articles:

- A. Equipment listed in Section I(C) may be certified to be moved out of a regulated/quarantine area from an infested premises or field by one of the following means: (1) once inspected and found to be free of soil and all live stages of *Commelina benghalensis* by an official inspector of the Bureau of Plant Industry (2) or after all the lands on which the piece of equipment has been operating during the last twelve months have been surveyed and found to be apparently free of *Commelina benghalensis*.
- B. Live stages listed in I(A) may not be moved from an infested premises or field except for research purposes and only with a written permit issued by the Bureau of Plant Industry.
- C. Soil may only be moved from an infested field or premises after being fumigated with an approved chemical to kill all life stages of *Commelina benghalensis*.

- D. Farmers harvesting hay who are not under a compliance agreement must have a field inspection prior to cutting hay, or in the case of peanuts prior to digging, in order to ship hay out of the regulated area.
 - E. A copy of certificate or permit issued by an official of the Bureau of Plant Industry or official of the issuing state must accompany each regulated item when moved from a regulated field.
- IV. Infested or non-certified shipments of regulated articles from a regulated area will be held under quarantine, until certification can be documented, or returned to the shipper at his expense unless live stages of *Commelina benghalensis* are detected in which case it shall be destroyed or fumigated at the owner's expense. If fumigation is required, the Bureau of Plant Industry nor its employees or agents, shall in any way be held responsible for injury to regulated articles which might result from such fumigation.
- V. The Bureau of Plant Industry hereby has authority to enter into compliance agreements with affected parties in order to effectively carry out the provisions of this rule.

ECONOMIC IMPACT STATEMENT

**FILED UNDER THE AUTHORITY OF SECTION 25-43-3.105 FOR A
NEW RULE TO BE PROMULGATED UNDER THE MISSISSIPPI PLANT ACT,
69-25-7 (2)**

PROPOSED RULE 43 ENTITLED: BENGHAL DAYFLOWER (*COMMELINA BENGHALENSIS*) QUARANTINE

The purpose of said rule is to prevent the further introduction of the noxious and invasive weed commonly known as benghal dayflower, *Commelina benghalensis*, into Mississippi and to assist affected farmers in eradicating or controlling infestations. The main emphasis for Rule 43 is to slow the spread of this invasive weed and significantly reduce the cost to agricultural farming in years to come.

According to Mississippi State University's Extension Service, if allowed to spread to other row crop areas of the state, approximately \$25.00 per acre will be added to the cost of herbicide treatments for farmers utilizing no-till farming practices. Reductions in yields have not yet been determined, but would be very significant if the weed is not controlled. Should benghal dayflower be allowed to move or be artificially transported to non-infested areas of the state, upwards of 5 million acres of farmland could be impacted in future years. Several other southeastern states consider this pest to be a major threat to agriculture.

Major crops currently affected in Mississippi are cotton and peanuts; however, any crop grown in a no-till glyphosate-dependent cropping system would be adversely affected. Pastures and other non-crop lands would also be affected and require additional herbicide applications.

Initial costs to the agency for implementing and enforcing the rule will be minimal, since currently only 12-15 farmers are affected within the regulated area. Paperwork will be minimal and the cost/benefit ratio well justifies the manpower needed in the field and office. It is estimated that it would not take over 240 man-hours to implement, conduct surveys and enforce the rule each year if the program succeeds. The success of the program will be evaluated annually to see if it continues to be a justifiable regulatory program.

Farming as applied to this rule would be considered a small business. The cost to the 12-14 farmers now affected would be minimal, requiring the occasional washing of equipment to remove soil to move from an infested field to a non-infested field or movement of said equipment to a non-regulated area of the state. Operating under a compliance agreement said farmers and the enforcing agency would not incur additional costs associated with a necessary inspection of the equipment to meet certification for movement.

The exact cost of not adopting the rule is not known, but would place a very significant hardship on farmers to maintain an adequate profit margin should the spread of the weed

not be deterred. According to the Mississippi State University Agricultural Economics Planning Budgets for crops, profit margins on most crops, including cotton and peanuts are marginal at best. An additional expense of \$25 per acre, which is the cost of additional herbicide applications necessary for infested fields, would be devastating. No alternative control measures are available to farmers which are more cost effective.

Submitted by Mike Tagert, Director, Mississippi Department of Agriculture and Commerce - Bureau of Plant Industry
February 1, 2007.